Medical Care Collection Fund (MCCF) Electronic Data Interchange (EDI) Transaction Applications Suite (TAS) ePharmacy Build 17

Electronic Claims Management Engine BPS*1.0*29
Outpatient Pharmacy PSO*7.0*561
Integrated Billing IB*2.0*648
CMOP PSX*2.0*91

Deployment, Installation, Back-out, and Rollback Guide

Version 1.0



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September 2021	1.0	Initial Version	MCCF EDI TAS ePharmacy Development Team

Artifact Rationale

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect particulars of these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

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1 Introduction

This document describes how to deploy and install the multi-build BPS PSO IB PSX BUNDLE 17.0 (which includes BPS*1.0*29, PSO*7.0*561, IB*2.0*648, and PSX*2.0*91) and how to back-out the product and rollback to a previous version or data set.

1.1 **Purpose**

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the multi-build BPS PSO IB PSX BUNDLE 17.0 (which includes BPS*1.0*29, PSO*7.0*561, IB*2.0*648, and PSX*2.0*91) will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

Dependencies 1.2

BPS*1.0*22 and BPS*1.0*26 must be installed BEFORE BPS*1.0*29.

PSO*7.0*452, PSO*7.0*549, and PSO*7.0*560 must be installed BEFORE PSO*7.0*561.

IB*2.0*647 must be installed BEFORE IB*7.0*648.

PSX*2.0*87 must be installed BEFORE PSX*2.0*91

1.3 **Constraints**

This patch is intended for a fully patched VistA system.

2 **Roles and Responsibilities**

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
1	VA OIT, VA OIT Health Product Support, and PMO (Leidos)	Deployment	Plan and schedule deployment (including orchestration with vendors)	Planning
2	Local VAMC and CPAC processes	Deployment	Determine and document the roles and responsibilities of those involved in the deployment.	Planning
3	Field Testing (Initial Operating Capability - IOC), Health Product Support Testing & VIP Release Agent Approval	Deployment	Test for operational readiness	Testing

ID	Team	Phase / Role	Tasks	Project Phase (See Schedule)
4	Health product Support and Field Operations	Deployment	Execute deployment	Deployment
5	Individual Veterans Administration Medical Centers (VAMCs)	Installation	Plan and schedule installation	Deployment
6	VIP Release Agent	Installation	Ensure authority to operate and that certificate authority security documentation is in place	Deployment
7		Installation	Validate through facility POC to ensure that IT equipment has been accepted using asset inventory processes	N/A; only existing VistA system will be used
8	VA's eBusiness team	Installations	Coordinate training	Deployment
9	VIP release Agent, Health Product Support & the development team	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)	Deployment
10	VA OIT, VA OIT Health Product Support, and MCCF EDI TAS Development Team (Halfaker)	Post Deployment	Hardware, Software and System Support	Warranty

3 Deployment

The deployment is planned as a national rollout.

This section provides the schedule and milestones for the deployment.

3.1 Timeline

The deployment and installation are scheduled to run for 30 days starting with national release.

3.2 Site Readiness Assessment

This section discusses the locations that will receive the deployment of the multi-build BPS PSO IB PSX BUNDLE 17.0 (which includes BPS*1.0*29, PSO*7.0*561, IB*2.0*648, and PSX*2.0*91).

3.2.1 Deployment Topology (Targeted Architecture)

This multi-build BPS PSO IB PSX BUNDLE 17.0 (which includes BPS*1.0*29, PSO*7.0*561, IB*2.0*648, and PSX*2.0*91) is to be nationally released to all VAMCs.

3.2.2 **Site Information (Locations, Deployment Recipients)**

The IOC sites are:

- Birmingham
- Richmond
- Lexington
- Eastern Kansas

Upon national release all VAMCs are expected to install this patch prior to or on the compliance date.

3.2.3 **Site Preparation**

The following table describes preparation required by the site prior to deployment.

Table 2: Site Preparation

Site / Other	Problem / Change Needed	Features to Adapt / Modify to New Product	Actions / Steps	Owner
N/A	N/A	N/A	N/A	N/A

3.3 Resources

Facility Specifics 3.3.1

The following table lists facility-specific features required for deployment.

Table 3: Facility-Specific Features

Site	Space / Room	Features Needed	Other
N/A	N/A	N/A	N/A

3.3.2 **Hardware**

The following table describes hardware specifications required at each site prior to deployment.

Table 4: Hardware Specifications

Required Hardware	Model	Version	Configuration	Manufacturer	Other
Existing VistA system	N/A	N/A	N/A	N/A	N/A

Please see the Roles and Responsibilities table in Section 2 for details about who is responsible for preparing the site to meet these hardware specifications.

3.3.3 Software

The following table describes software specifications required at each site prior to deployment.

Table 5: Software Specifications

Required Software	Make	Version	Configuration	Manufacturer	Other
Fully patched Electronic Claims Management Engine package within VistA	N/A	1.0	N/A	N/A	N/A
Fully patched Outpatient Pharmacy package within VistA	N/A	7.0	N/A	N/A	N/A
Fully patched Integrated Billing package within VistA	N/A	2.0	N/A	N/A	N/A
Fully patched CMOP package within VistA	N/A	2.0	N/A	N/A	N/A

Please see the Roles and Responsibilities table in Section 2 above for details about who is responsible for preparing the site to meet these software specifications.

3.3.4 **Communications**

The sites that are participating in field testing (IOC) will use the "Patch Tracking" message in Outlook to communicate with the ePharmacy eBusiness team, the developers, and product support personnel.

3.3.4.1 Deployment / Installation / Back-out Checklist

The Release Management team will deploy the multi-build BPS PSO IB PSX BUNDLE 17.0, which is tracked nationally for all VAMCs in the National Patch Module (NPM) in Forum. Forum automatically tracks the patches as they are installed in the different VAMC production systems. One can run a report in Forum to identify when and by whom the patch was installed into the VistA production at each site. A report can also be run to identify which sites have not currently installed the patch into their VistA production system. Therefore, this information does not need to be manually tracked in the chart below.

Table 6: Deployment / Installation / Back-out Checklist

Activity	Day	Time	Individual who completed task
Deploy	N/A	N/A	N/A
Install	N/A	N/A	N/A

4 Installation

4.1 Pre-installation and System Requirements

Multi-build BPS PSO IB PSX BUNDLE 17.0 is installable on a fully patched M(UMPS) VistA system and operates on the top of the VistA environment provided by the VistA infrastructure packages. The latter provides utilities which communicate with the underlying operating system and hardware, thereby providing each VistA package independence from variations in hardware and operating system.

4.2 Platform Installation and Preparation

Refer to the BPS*1.0*29 documentation on the NPM in Forum for the detailed installation instructions. These instructions include any pre-installation steps if applicable.

4.3 Download and Extract Files

Refer to the BPS*1.0*29, PSO*7.0*561, IB*2.0*648, and PSX*2.0*91 documentation on the NPM to find related documentation that can be downloaded. The patch description of each patch will be transmitted as a MailMan message from the NPM. These messages can also be pulled from the NPM. The patches themselves are bundled together into the multi-build BPS PSO IB PSX BUNDLE 17.0. The host file containing these patches must be downloaded separately. The file name is BPS_1_29_PSO_IB_PSX.KID and it can be found on the VistA software download site (https://download.vista.med.va.gov/index.html/SOFTWARE/).

4.4 Database Creation

Multi-build BPS PSO IB PSX BUNDLE 17.0 modifies the VistA database. All changes can be found on the NPM documentation for this patch.

4.5 Installation Scripts

No installation scripts are needed for multi-build BPS PSO IB PSX BUNDLE 17.0 installation.

4.6 Cron Scripts

No Cron scripts are needed for multi-build BPS PSO IB PSX BUNDLE 17.0 installation.

4.7 Access Requirements and Skills Needed for the Installation

Staff performing the installation of this multi-build will need access to FORUM's NPM to view all patch descriptions. Staff will also need access and ability to download the host file from the VistA software download site. The software is to be installed by each site's or region's

designated VA OIT IT Operations Service, Enterprise Service Lines, VistA Applications Division¹.

4.8 Installation Procedure

Detailed instructions for installing the multi-build BPS PSO IB PSX BUNDLE 17.0 (which includes BPS*1.0*29, PSO*7.0*561, IB*2.0*648, and PSX*2.0*91) can be found on the patch description for BPS*1.0*29, which can be found on the NPM. Installing the multi-build BPS PSO IB PSX BUNDLE 17.0 will install all component patches (BPS*1.0*29, PSO*7.0*561, IB*2.0*648, and PSX*2.0*91).

4.9 Installation Verification Procedure

Refer to the BPS*1.0*29 documentation on the NPM for detailed installation instructions. These instructions include any post installation steps if applicable.

4.10 System Configuration

No system configuration changes are required for this patch.

4.11 Database Tuning

No reconfiguration of the VistA database, memory allocations or other resources is necessary.

5 Back-out Procedure

Back-out pertains to a return to the last known good operational state of the software and appropriate platform settings.

5.1 Back-out Strategy

A decision to back out could be made during Site Mirror Testing, during Site Production Testing, or after National Release to the field (VAMCs). The best strategy decision is dependent on the stage during which the decision is made.

5.1.1 Mirror Testing or Site Production Testing

If a decision to back out is made during Mirror Testing or Site Production Testing, a new version of the patch can be used to restore the build components to their pre-patch condition.

5.1.2 After National Release but During the Designated Support Period

If a decision to back out is made after national release and within the designated support period, a new patch will be entered into the NPM in Forum and will go through all the necessary milestone reviews, etc. as a patch for a patch. This patch could be defined as an emergency

¹ "Enterprise service lines, VAD" for short. Formerly known as the IRM (Information Resources Management) or IT support.

patch, and it could be used to address specific issues pertaining to the original patch or it could be used to restore the build components to their original pre-patch condition.

5.1.3 After National Release and Warranty Period

After the 90-day warranty period, the VistA Maintenance Program will produce the new patch, either to correct the defective components or restore the build components to their original prepatch condition.

5.2 Back-out Considerations

Changes implemented with multi-build BPS PSO IB PSX BUNDLE 17.0 can be backed out in their entirety or on an enhancement-by-enhancement basis. Either could be accomplished via a new version of multi-build BPS PSO IB PSX BUNDLE 17.0 if before national release or a new multi-build if after national release.

5.2.1 Load Testing

N/A. The back-out process will be executed at normal rather than raised job priority and is expected to have no significant effect on total system performance. After the reversion, the performance demands on the system will be unchanged.

5.2.2 User Acceptance Testing

Below are the acceptance criteria for each story included in BPS PSO IB PSX BUNDLE 17.0.

US13360

- Process an order for a billable prescription for a patient with a billing eligibility of TRICARE or CHAMPVA that does not have an active TRICARE or CHAMPVA insurance policy on file and Payer Additional Message includes 'Not Insured' on the Reject Information Screen.
- Process an order for a billable prescription for a patient with a billing eligibility of TRICARE or CHAMPVA that does not have an active TRICARE or CHAMPVA insurance policy on file and the Reject Type should display the patient type (TRICARE or CHAMPVA) -Non Billable on the Reject Information Screen.
- Process an order for a non-billable prescription for a patient with a billing eligibility of TRICARE or CHAMPVA that does not have an active TRICARE or CHAMPVA insurance policy on file and a reason of 'Not Insured' should display above the Reject Notification Screen. (Regression)
- The Reject File explanation field for eC and eT has been updated to remove the word Drug. The explanation field shows:
 - TRICARE-NON BILLABLE
 - CHAMPVA-NON BILLABLE
- Reason of "Drug not billable" has been updated to "Not Billable" on the Reject Notification Screen.
- Reason of "Drug not billable" has been updated to "Not Billable" on the View Process Screen.

- Process an order for a billable prescription for a patient with a billing eligibility of TRICARE or CHAMPVA that does not have an active TRICARE or CHAMPVA insurance policy on file and the default action should be Q//.
- Reject Notification Screen will continue to have a default action of D// for scenarios other than inactive insurance. (Regression)

US18582

- The new Benefit Stage Indicator Code has been updated in file BPS NCPDP BENEFIT STAGE INDICATOR CODE to reflect that the code has been added.
- The new Submission Clarification Code has been updated in file BPS NCPDP CLARIFICATION CODES to reflect that the code has been added.
- The new Reject Codes have been updated in file BPS NCPDP REJECT CODES to reflect that the codes have been added.
- New Submission Clarification Code can be:
 - selected when performing the RED action from the ECME User Screen, as long as the reject is not displayed on the pharmacist WL.
 - selected when performing the CLA action from the Pharmacist Worklist.
 - selected when performing the SMA action from the Pharmacist Worklist.
- When patient type is Veteran new Reject Code can be:
 - received in a claim response and stored in VistA with the claim response.
 - displayed on the ECME User screen.
 - displayed on the Rejected Claims Report and Closed Claims Report.
 - displayed on the LOG Print Claim Log (ECME User Screen and VER).
- When patient type is TRICARE or CHAMPVA new Reject Code can be:
 - received in a claim response and stored in VistA with the claim response.
 - displayed on the ECME User screen. •
 - displayed on the Pharmacists' Worklist.
 - displayed on the Pharmacists' View/Process (VP).
 - displayed on the Reject Notification Screen. •
 - displayed on the Reject Information Screen.
 - displayed on the Rejected Claims Report and Closed Claims Report.
 - displayed on the LOG Print Claim Log (ECME User Screen and VER).

US34858

- The Prescription file contains two new fields (a flag) to bypass the 3/4 days supply functionality, one for the original fill and one on the Refill sub-file.
- When the user enters ?? on the Outpatient Medications Screen, a new hidden action "Bypass 3/4 Day Supply" is available to bypass the 3/4 days supply processing logic.
- When the new hidden action is selected, the user is presented with a message describing the action to be taken and is asked to continue. Refer to Functional Design Document.

- When the new hidden action is selected and the Bypass 3/4 Day Supply flag is set to "NO", if the user continues the Bypass 3/4 Day Supply Flag will be set to "YES" and the 3/4 Days Supply logic will be bypassed when the RX is sent to CMOP.
- When the new hidden action is selected and the Bypass 3/4 Day Supply flag is set to "YES", if the user continues the Bypass 3/4 Day Supply Flag will be set to "NO" and the 3/4 Days Supply logic will apply when the RX is sent to CMOP.
- When the Bypass flag is set to "Y" for prescriptions with third party insurance the 3/4 days supply processing logic is bypassed. (Applies to both new action and new option.)
- If a non-billable prescription number is entered while using the option, an alert is displayed. Refer to Functional Design Document
- When the Bypass flag is set to "Y" for prescriptions with a billable product the 3/4 days supply processing logic is bypassed. (Applies to both new action and new option.)
- If the user attempts to perform the "BY" action on a non-billable prescription on the OP Medication screen, an alert is displayed. Refer to Functional Design Document
- Bypass flag will apply to most current fill (applies to both the action and the option)
- When the 3/4 days supply logic is bypassed for one fill on a prescription, the logic is not automatically bypassed for subsequent fills.
- Auto-resolve process is working as it currently does. (Regression testing.)
- A new menu option of "Bypass 3/4 Day Supply" is available on the ePharmacy Menu to allow the user to enter one or more prescriptions to bypass the 3/4 days supply processing.
- When the new option is selected, the user can enter one or more prescriptions to bypass the 3/4 days supply processing.
- When the new option is selected, the user is presented with a message describing the action to be taken and is asked to continue. Refer to Functional Design Document.
- When entering ?? at the ePharmacy Menu, the description of the new option is displayed. Refer to Functional Design Document.
- If a RX is selected from the new option and is not on the CMOP Suspense Queue an alert is displayed on the screen: RX is not on CMOP suspense queue
- Bypass flag can be set for the Rx from the OP Medication screen without being on CMOP Suspense Queue.
- If an invalid prescription number is entered while using the option, ?? is displayed on the screen. Refer to Functional Design Document.
- Bypass option and action applies for all prescription types (Veteran, CHAMPVA & TRICARE)
- Activity Log reflects user setting and/or removing the flag at the time the CMOP Suspense is run capturing Username, Date, and Time of activity.
- Activity Log reflects CMOP activity.
- When using the new option, and the user sets the Bypass flag to "Y", the suspense date will automatically be changed to the current date.

• When the Bypass flag has been set to "Y" for a RX and the user performs the action CSD (Change Suspense Date) the following alert is displayed: *Currently the Bypass 3/4 Day Supply flag is set to YES. If you continue, the prescription fill will transmit to CMOP on the date entered.*

If the user continues, the CSD function will process as it currently does.

Refer to Functional Design Document.

US40754

• ePharmacy CMOP Not TRANSMITTED Rxs" VistA bulletin does not contain the Release of Information (ROI) reference.

5.3 Back-out Criteria

It may be decided to back out this patch if the project is canceled, the requested changes implemented by multi-build BPS PSO IB PSX BUNDLE 17.0 are no longer desired by VA OI&T and the ePharmacy eBusiness team, or the patch produces catastrophic problems.

5.4 Back-out Risks

Since the ePharmacy software is tightly integrated with external systems, any attempt at a backout should include close consultation with the external trading partners such as the Financial Services Center (FSC) and the Health Care Clearing House (HCCH) to determine risk.

5.5 Authority for Back-out

Any back-out decision should be a joint decision of the Business Owner (or their representative) and the Program Manager with input from the Health Product Support (HPS) Application Coordinator, developers (both project and Tier 3 HPS), and if appropriate, external trading partners such as the VA Financial Service Center (FSC), Change Healthcare, or Transunion.

5.6 Back-out Procedure

The back-out plan for VistA applications is complex and not a "one size fits all" solution. The general strategy for a VistA back-out is to repair the code with a follow-up patch. The development team recommends that sites log a ticket if it is a nationally released patch.

If it is prior to national release, the site will be already working directly with the development team daily and should contact that team. The development team members will have been identified in the Initial Operating Capability (IOC) Memorandum of Understanding (MOU). As discussed in section 5.2, it is likely that development team can quickly address via a new software version. If the site is unsure whom to contact, they may log a ticket or contact Health Product Support - Management Systems Team.

Multi-build BPS PSO IB PSX BUNDLE 17.0 contains the following build components:

- Routines
- Data Dictionaries
- Files

- Menu Options
- Protocols

While the VistA KIDS installation procedure allows the installer to back up the modified routines using the 'Backup a Transport Global' action, the back-out procedure for global, data dictionary and other VistA components is more complex and requires issuance of a follow-up patch to ensure all components are properly removed and/or restored. All software components (routines and other items) must be restored to their previous state at the same time and in conjunction with the restoration of the data.

Please contact the EPMO team for assistance since this installed patch contains components in addition to routines.

5.7 Back-out Verification Procedure

Successful back-out is confirmed by verification that the back-out patch was successfully implemented. This includes successful installation and testing that the back-out acts as expected, as defined together with the team the site contacted in section 5.5.

6 Rollback Procedure

Rollback pertains to data. The data changes in this patch are specific to the operational software and platform settings. These data changes are covered in the Back-out procedures detailed elsewhere in this document.

6.1 Rollback Considerations

Not applicable.

6.2 Rollback Criteria

Not applicable.

6.3 Rollback Risks

Not applicable.

6.4 Authority for Rollback

Not applicable.

6.5 Rollback Procedure

Not applicable.

6.6 Rollback Verification Procedure

Not applicable.